



US Army Corps  
of Engineers  
New England District

Current as of  
June 30, 2001

# Update Report for Connecticut



696 Virginia Road, Concord, Massachusetts 01742-2751  
Public Affairs Office, 978-318-8237  
Home Page: <http://www.nae.usace.army.mil>

## Mission

The missions of the New England District, U.S. Army Corps of Engineers include flood prevention and control, emergency response for natural disasters and national emergencies, environmental remediation and restoration, natural resource management, streambank and shoreline protection, navigation maintenance and improvement, support to military facilities and installations, and engineering and construction support to other federal agencies. The six New England states cover 66,000 square miles, with 6,100 miles of coastline, 11 deep water commercial ports, 102 recreational and small commercial harbors, 13 major river basins, and thousands of miles of navigable rivers and streams. The district operates and maintains 31 dams, two hurricane barriers and the Cape Cod Canal. Through its Regulatory program, it processes about 4,000 applications per year for work in waters and wetlands of the six-state region. We employ about 550 professional civilian employees, with about 400 stationed at our headquarters in Concord, Massachusetts. Other Corps of Engineers employees serve at Corps projects and offices throughout the region.

Index	
Conservation & Environment	4
Flood Control Projects	7
Flood Damage Prevention	2
Flood Plain Management	3
Formerly Used Site Remediation	5
Navigation	1
Planning Assistance	3
Regulatory Program	6
Special Studies	10
Superfund	4

## Navigation

**CONNECTICUT RIVER (1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> CDs)** – The federal navigation project includes a 15-foot-deep channel from the mouth of the river to Hartford. Pilots have expressed concerns about shoaling at various bars and shoals on the river. As a result of a meeting held with the pilots and others, it was agreed that Pistol Point Bar, near Cromwell, was the area of critical concern to the pilots and that an attempt would be made to expedite maintenance dredging of this bar while continuing the preliminary work necessary for maintaining other areas along the river. *Recent conversations with pilots and others indicate that river traffic in the Pistol Point area may be reduced.*

The material proposed to be dredged in Pistol Point Bar has been tested and found to be suitable for in river disposal. Consistency concurrence with state's Coast Program and Water Quality Certification has been requested from the Connecticut Department of Environmental Protection. We are concurrently reevaluating the

need for maintenance dredging at this bar.

**NEW LONDON HARBOR, NEW LONDON AND GROTON (2<sup>nd</sup> CD)** - In January 1999, the Department of Environmental Protection (DEP) requested the Corps of Engineers to initiate a Section 107 Study to determine what steps could be taken to minimize/mitigate wave damages on public, private and military shore property along the Thames River in New London and Groton. In January 2001, we completed a preliminary economic analysis to determine the financial benefits to performing any navigation improvements, such as constructing a wave attenuation structure to protect the southern waterfront of the city of New London. That preliminary analysis indicated that the proposal warrants further study and there is a potential for us to enter into a cost-sharing agreement with a nonfederal sponsor. On January 31, 2001, we met with the Thames Maritime Coalition represented by city and state agencies and harbor interests. We explained the details of the economic analysis and indicated that the next step will be to estimate the

costs associated with possible construction options. A proposal by the state DOT to increase the scope of the study to cover pier and channel deepening at the New London State Pier was discussed and eliminated from further consideration at this time.

*Design and cost estimates for the structure are being prepared. If the proposal continues to be favorable (i.e., benefits outweigh costs), we will meet with the Thames Maritime Coalition again and*

identify a public nonfederal agency interested in initiating a detailed feasibility study to address the local navigation needs. This study would be cost-shared 50/50 with the Corps and would about two years to complete. If the final analysis indicates that construction is feasible, plans, specifications and construction costs would be cost-shared 65 to 80 percent federal, 35 to 20 percent nonfederal, dependant on the ultimate breakdown between navigation benefits and storm damage prevention benefits.

---

## Flood Damage Prevention

**HARBOR BROOK, MERIDEN (5<sup>th</sup> CD)** - The New England District has completed a reconnaissance investigation on Corps involvement in providing flood control improvements along Harbor Brook. A comparison of flood damages that could occur along the brook against flood control costs developed by the city indicate that elements of the city's flood control plan are economically justified. Based on these positive results, detailed feasibility studies have been approved. *The state of Connecticut, Department of Environmental Protection (DEP), will act as the sponsor, with the city of Meriden providing the nonfederal cost share of \$200,000. Based on total estimated feasibility study costs of \$500,000, this amount represents 50 percent of all study costs over the initial federally funded limit of \$100,000. Following approval of city funds by the Meriden City Council on November 20, 2000, DEP entered into agreement with the city to allow transfer of these funds to the state. The state executed the Feasibility Cost Sharing Agreement (FCSA) in late March 2001. Contracts for geotechnical investigations have been awarded, and explorations will be conducted in July 2001. Other field efforts, such as wetland delineation and mapping, have been initiated.*

**MORRIS COVE, NEW HAVEN (3<sup>rd</sup> CD)** - On October 19, 2000, we executed a feasibility cost sharing agreement (FCSA) with the nonfederal sponsor, the city of New Haven, for a study to reduce storm and hurricane damage at Morris Cove. A public meeting with Corps, Connecticut Department of Environmental Protection (CT

DEP), and city officials was held on January 11, 2001. Lively discussion led to a commitment to examine limited "toe" protection to several existing seawalls, as well as extending the seawall as a solution to address the wave damage. CT DEP recommended that the affected homeowners explore additional aesthetic improvements by arranging for placement of sand at Crescent Beach along the cove. *Survey work was completed in June 2001. Follow on modeling and preliminary design is scheduled for summer 2001.*

**POINT BEACH, MILFORD (3<sup>rd</sup> CD)** - A feasibility study for raising flood-prone houses in low areas adjacent to Point Beach was completed in 1994. The Chief of Engineers approved a plan to raise 58 houses, and bids were opened in February 1997. However, the bids were rejected because they significantly exceeded the government estimate. In March 2000, the Connecticut Department of Environmental Protection (CT DEP) and the city of Milford indicated a willingness to rebid the project under new cost-sharing regulations allowing for a \$3,000,000 federal funding limit. The CT DEP signed the amended Project Cooperation Agreement, and Plans and Specifications were issued in January 2001. *DRL Corporation of Oxford, MA, was the low bidder. The contractor was given the notice to proceed in May and construction should begin in early July.*

**SALMON RIVER, HADDAM, EAST HADDAM AND EAST HAMPTON (1<sup>st</sup> and 2<sup>nd</sup> CD)** - A feasibility cost-sharing agreement (FCSA) was executed on October 31, 2000, to perform a study for flood control of the Salmon River in Haddam,

East Haddam, and East Hampton. The nonfederal sponsor is the Connecticut Department of Environmental Protection (CT DEP). The estimated cost of the feasibility study is \$215,000, cost shared 50/50, after the first federally-funded \$100,000. The feasibility study began with a coordinated site visit on December 5, 2000. *The feasibility study focuses on the construction of a system of concrete piers just upstream of a dam to retain ice, which should prevent ice buildup with its associated flooding downstream. In late February 2001, CT DEP submitted a request to the Corps to prepare an estimate for study and design of a sedimentation basin to complement the construction of the ice control structure. The results of completed hydrodynamic modeling by the Corps Cold Regions Research and*

*Engineering Lab located in Hanover, NH indicate that the two components are compatible.*

*The Corps is pursuing finalizing an amendment to the FCSA with CT DEP for the design and preparation of the plans and specifications for the sedimentation basin. The district has reviewed the existing study schedule and is preparing a schedule to explore combining the two features as a single construction effort. The cost of the study, design, and construction of the sedimentation basin will be funded entirely by CT DEP. Corps representatives will attend a regular briefing of the project with local stakeholders, the CT DEP and others at the Sunset Resort in Moodus, CT on July 19, 2001.*

---

## Planning Assistance

**BRIDE BROOK WETLANDS STUDY (2<sup>nd</sup> CD) -** *The Connecticut Department of Environmental Protection and the New England District conducted a cost-shared study of the Bride Brook Coastal Wetland at Rocky Neck State Park in East Lyme. This wetland has been identified as being tidally-restricted, with tidal flows entering the wetland at the south through twin culverts under a*

*barrier beach. The twin culverts are to be replaced by the state in the next few years. The investigation identified alternatives for the replacement of the twin outlet pipes, using hydrologic modeling to determine the resulting effects upon tidal wetland habitat. The final report will be available in July 2001.*

---

## Flood Plain Management Services (FPMS)

**STILL RIVER, DANBURY (5<sup>th</sup> CD) -** The city of Danbury has asked that the New England District examine the flooding situation along the Still River, specifically in the Lake Kenosia area of the watershed. The request came as a result of the floods experienced with Hurricane Floyd in August 1999. A meeting between city and Corps representatives was held in June 2000 to discuss the situation and tour the area in question. District personnel analyzed the upper Still River for possible flood mitigation alternatives using FPMS funds. A draft report on the study's findings was completed in February 2001 and is currently being reviewed by the city of Danbury. Results of the

*investigation indicate that the use of the structural or non-structural measures to reduce flood damages in the Lake Kenosia area may be warranted.*

**WESTPORT FLOOD PREVENTION INVESTIGATION (4<sup>th</sup> CD) -** The Corps has conducted an analysis of flooding along the Saugatuck River, adjacent to Parker Harding Plaza. This area contains over forty businesses that are subject to periodic flooding due to a combination of heavy rainfall and tidal surge. The study suggests recommendations for preventing future flooding in the area. *The report was sent to the town of Westport in November 2000. A potential Continuing Authorities Section 205 study is anticipated for FY 2002.*

## Conservation & Environment

**DEFENSE ENVIRONMENTAL RESTORATION PROGRAM (DERP)** - This congressionally directed program (PL 98-212) provides for environmental restoration. It emphasizes the identification, investigation and cleanup of hazardous and toxic waste; unexploded ordnance; and unsafe buildings, structures and debris at current and former military facilities. Fifty-five formerly used Defense sites have been identified in Connecticut. Site and project eligibility investigations at 54 sites are now complete, including 37 where no work was found to be necessary. The remaining site, the **University of Connecticut Bachelor Housing Site (2<sup>nd</sup> CD)**, will be studied in the future when priorities and funding allow. Of the 17 sites where work was needed, the following efforts are underway:

Environmental restoration projects at Fort Griswold and Pine Island Battery, **Groton (2<sup>nd</sup> CD)**; Pratt & Whitney, **Southington (6<sup>th</sup> CD)**; and Fort Hale, **New Haven (3<sup>rd</sup> CD)** will be performed when priorities and funding allow.

A study to determine the responsible parties at the former Air Force Plant #62, **Middletown (2<sup>nd</sup> CD)**, found no federal responsibility, based on the indemnification clause contained in the real estate transfer documents.

An archive search report under the Corps ordnance and explosive waste investigation program has been done for Rentschler and Brainard fields, **Hartford (1<sup>st</sup> CD)**, by the Army Engineering and Support Center in Huntsville, AL. No evidence has been found that ordnance still exists, and additional investigation is not warranted at this time.

Construction projects totalling \$1,373,434 have been completed at the following locations:

### First District

**Cromwell Nike Site, Tank Removal**

**East Windsor Nike Site, Tank and Transformer Removal**

**Manchester Nike Missile Site**

### Third District

**New Haven Army Airfield, Transformer Removal**

### Fourth District

**Fairfield Nike Site, Tank Removal & Silo Closure**

**Westport Nike Site, Tank Removal and Silo Closure**

### Fifth District

**Ansonia Nike Site, Tank/Transformer Removal, Silo Closure**

**Waterbury Naval Reserve Rehab Center, Tank Removal**

### Sixth District

**Bradley International Airport, Tank Removal**

**Farmington Nike Site, Tank Removal & Silo Closure**

## LONG ISLAND SOUND NATIONAL ESTUARY PROGRAM

- The district is actively participating in the Long Island Sound National Estuary Program by attending meetings and providing water resource planning support and expertise. A paper entitled "Remediation Techniques for Contaminated Sediment in Long Island Sound" has been provided to the Long Island Sound National Estuary Program for its use in decision making.

---

## Support to the Environmental Protection Agency

**SUPERFUND ASSISTANCE** - The New England District is designated as the Corps of Engineers' total support agency for the U.S. Environmental Protection Agency's (EPA) Region I (New England) Superfund Program. This includes responsibility for

providing technical assistance, real estate support, design services and construction management.

**FERRY CREEK, STRATFORD (3<sup>rd</sup> CD)** - The Corps is providing technical assistance for the Remedial Investigation and Feasibility Study (RI/FS) of Ferry Creek in Stratford. Contaminated materials from the Raymark site were used as fill



along the creek and in wetlands along the Housatonic River. Contamination from the site also flowed through culverts to the creek and contaminated wetland areas. *Currently, the Corps is awaiting completion of FS reports for review. These reports will be used to support a cleanup strategy to be documented in EPA's Record of Decision.*

**HOUSATONIC BOAT CLUB/Shore Road, Stratford (3<sup>rd</sup> CD)** – This site received fill from the Raymark Facility, and site soils have asbestos concentrations of up to 85 percent, as well as elevated levels of lead, dioxin and PCBs. The New

England District worked with the town, state and EPA to develop a strategy for temporary (3-5 year) stabilization of the site, pending long-term resolution of issues related to its permanent remediation. *Temporary measures included replacing utilities, excavating and consolidating contaminated soil adjoining wetlands and the river, and capping of exposed contaminated soil with combinations of geotextile, stone and bituminous pavement. Work on the \$2 million project is complete. We are now preparing a Remedial Investigation/Feasibility Study for the site, with a completion date for the Remedial Investigation scheduled in late-2001.*

---

## Formerly Utilized Sites Remedial Action Program (FUSRAP)

During the 1940s, 1950s, and 1960s, work was performed at sites throughout the United States as part of the nation's early atomic energy program. The Department of Energy (DOE) began the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to study these sites and take appropriate cleanup action. Even though FUSRAP sites contain levels of radioactivity above current DOE guidelines, it found that none of the sites posed an immediate health risk to the public or the environment, given current land uses. The FY98 Energy and Water Appropriations Act transferred management of FUSRAP from DOE to the U.S. Army Corps of Engineers. There is only one FUSRAP site that is currently being managed by the New England District in Connecticut.

**COMBUSTION ENGINEERING SITE, Windsor (1<sup>st</sup> CD)** - The Combustion Engineering (CE) Site occupies approximately 600 acres in Windsor. The facility supplied components for reactor projects managed by the Atomic Energy Commission in the 1940s and 1950s. Initially, the components did not involve nuclear materials, but in 1955, new contracts led to the use of uranium. In the early 1980s, radiological surveys detected radium and thorium contamination in three buildings, related drainpipes and sewer lines, a waste storage pad area, a waste drum burial site, and a brook on the property. In 1986 Combustion Engineering

conducted a cleanup of these areas, and a follow-up survey in 1989 indicated that the contamination had been reduced to levels that met established Nuclear Regulatory Commission guidelines. An additional survey conducted in 1993 indicated the need for further cleanup of these locations.

The New England District has completed an initial survey of the site and a comprehensive characterization of Building 3. A comprehensive site-wide characterization survey of the remaining areas of concern was initiated in May 2000, and fieldwork was completed in December 2000. *A report consolidating and presenting the data from the survey is being prepared and will be completed in September 2001.*

*A successful project partnership has been forged between Combustion Engineering and the U.S. Army Corps on this project. This effort resulted in a significant understanding among the parties that one set of clean-up standards would apply for both the CE Decommissioning and Disposal (D+D) work and the FUSRAP work. CE will establish the standards, known as Derived Concentration Guideline Levels (DCGL's), during the summer of 2001 for their D+D work. The two parties are also currently conducting discussions regarding the possibility of a Cost Sharing Agreement and pursuing a "CERCLA PRP Team" approach to the project.*

Work is presently ongoing to establish an

Administrative Record for the project with a Public Repository in the community of Windsor. The next planned phase of work is a Remedial Investigation and a Feasibility Study (RI/FS) which is planned for

a contract award in late fall 2001. The CERCLA process is being followed, and we are working to complete a Record of Decision by 2003. The Corps will consider performing removal actions as the need arises and funds are made available.

---

## Regulatory Activities

Department of the Army permits are required from the Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. The Corps reviews permit applications for work affecting navigable waters under our Section 10 authority and the discharge of fill material into all waters, including inland wetlands, under Section 404. *At the end of February, there were 49 active applications for regulated work in Connecticut. During March, April, and May, 1,319 new applications were received. Final actions were taken on 110 applications, including four individual permits, 65 general permits, seven not required, and no denials. The balance at the end of May was 49 active files.*

**PROGRAMMATIC GENERAL PERMIT** - The New England District has comprehensive Programmatic General Permits (PGPs) in place in each of the six New England states covering work with minimal impact on the aquatic environment. Up to 98 percent of all permits issued in New England are PGPs. The PGPs are based on the state thresholds for most categories of environmental impacts, and applicants generally need only file with the state. The federal screening is virtually transparent to applicants, and the PGP approval is either included in the state approval letter or mailed simultaneously. Applications appropriately covered under the PGPs are generally approved in under 30 days. Applicants have commented favorably about the simplicity, predictability and efficiency of the PGPs. *The PGP for Connecticut was re-issued on May 15<sup>th</sup> for an additional five years.*

**CONNECTICUT ROUTE 6 (2<sup>nd</sup> CD)** - In November 1998, we agreed with the Connecticut Department of Transportation (DOT) that the upgrade of Route 6 was not a practicable

alternative, in that it would not meet the project needs. This followed our earlier 1998 determination that DOT's preferred 133A alternative would not likely receive a permit. In November 1999, DOT submitted an application for Alternative 133A modified. The DOT, the Federal Highway Administration (FHWA) and the federal resource agencies held a working group meeting in February 2000. Additional information (modifications) for expressway alternatives 133 and 133/18-25 to compare impacts with the modified 133A plan for which the state had submitted an application was requested at that time.

Following additional submissions and subsequent working group meetings, we received DOT's Alternatives 133B (a modification of 113A), 133mod, and 133/18-25mod information in September 2000. A public hearing on the alternatives was held in Vernon on November 21, 2000. In early January 2001, we identified and informed the state that the Least Damaging Practicable Alternative is 133/18-25mod. The Corps is still awaiting notification from the DOT regarding which alternative they would like us to make a permit decision on.

**CONNECTICUT ROUTE 11 (2<sup>nd</sup> CD)** - DOT and the Federal Highway Administration are evaluating alternatives for improvements to address safety and congestion in the Routes 82/85/11 corridors in the communities of **Salem, Montville, Waterford and East Lyme**. The towns prefer a new alignment that will complete the existing Route 11 expressway to an interstate connection with Route 95 in Waterford. During the hearings, the affected communities asked DOT to evaluate an arterial design, with a greenway corridor concept alongside, as opposed to a full expressway. The corridor towns oppose any widening of Route 85 from two lanes to four lanes. EPA commented that

the new location corridors would result in significant impacts to the aquatic ecosystem. *In order to achieve a compromise solution that would allow DOT to get a permit, we have initiated a 60-day streamlining process with EPA, FWS and local representatives. We are now evaluating options and plan to have recommendations for the agency decision-makers by the end of July.*

**CONNECTICUT ROUTE 7, BROOKFIELD TO NEW MILFORD (5<sup>th</sup> CD)** - The Connecticut Department of Transportation (CT DOT) Route 7 Brookfield to New Milford project study area begins at the terminus of the Route 7 expressway in Brookfield and continues north to its intersection with Route 202 in New Milford. The project study corridor is approximately 7.6 miles in length. The purpose of the proposed improvements is to address problems associated with excessive traffic volume, traffic flow, and safety conditions along the corridor in Brookfield and New Milford.

*Five “build” alternatives were evaluated in a CT DOT/Federal Highway Administration Environmental Assessment (EA)/Findings Of No Significant Impact for the Brookfield to New Milford project area consisting of four bypass alternatives and the widening of the existing Route 7 alternative. Bypass alternatives (identified as 1,2,3,4) involve a bypass to the west of existing Route 7 from Brookfield to the vicinity of the Brookfield-New Milford line. Bypasses 2 and 4 would terminate at the Brookfield-New Milford town line. Bypass Alternatives 1 and 3 would terminate south of the Brookfield-New Milford town line in the vicinity of Laurel Hill Road. All Brookfield alternatives would be combined with a widening of existing Route 7 from the Brookfield-New Milford town line to the northern project limit at the intersection of Routes 7 and 202, identified as the “Northern Widening” in the EA. The Northern Widening would extend from the Brookfield-New*

*Milford town line and continue to the intersection of Routes 7 and 202 in New Milford. Currently, bypass alternatives 3 and 4 are still in consideration.*

By letter of December 18, 2000, we informed CT DOT that either of the two alternatives would be permissible, since the degree of impacts are similar. *We have conducted site visits of proposed mitigation sites and DOT is now refining design of the preferred Alternative 4. We expect to have mitigation proposals finalized by the end of the summer.*

**Dr. Paul Maugle, The Mohegan Tribe (2<sup>nd</sup> CD)** – *An application was received in November 2000 to install fixed and floating structures for a commercial aquaculture operation within the surrounding waters of Stonington Harbor, Niantic Bay, Pine Island Bay, Pawcatuck River and Fishers Island Sound. Shellfish rearing devices proposed include floating upwellers, surface and subsurface long lines with trays and on-bottom cages with grow-out bags. Surface and subsurface long lines will occupy up to 250 acres of navigable waters and on-bottom cages will occupy up to 100 acres of bottom in Long Island Sound and Fishers Island Sound. Hundreds of comments have been received in response to the March 20, 2001 Public Notice. Pine Island Bay lease site has been the focus of much objection. Concerns at this site include the existence of a special anchorage area, public mooring area, a popular navigable fairway for several large commercially managed recreational marinas and the use of the southern island as a popular recreational trolling area. The basis of the concerns focus on potential for displacement of recreational boaters, commercial fishermen, recreational fishermen and the potential hazards to navigation that floating and submerged long-line complexes of this nature could pose. A public hearing was held June 25, 2001 in Groton, Connecticut.*

## **Flood Control Projects & Natural Resource Management**

The New England District has constructed 12 flood control dams and three hurricane protection projects in Connecticut. Information on each is

provided below. The Corps of Engineers, working with agencies of the state of Connecticut, provides quality outdoor recreational opportunities at each of the seven Corps-operated flood control reservoirs located within the state. The lands and waters of these civil works water resource projects are

managed to conserve the natural resources as well as for the primary authorized purpose of flood control.

**BLACK ROCK LAKE (6<sup>th</sup> CD)** on Branch Brook in Thomaston and Watertown was completed in 1971 at a cost of \$8.2 million. More than 2.8 billion gallons of water can be stored behind the 933-foot-long, 154-foot-high dam. To date \$65 million in damages have been prevented. An estimated 61,000 visitors annually enjoy hiking, fishing and hunting on the 319 acres of land and water at Black Rock Lake.

**COLEBROOK RIVER LAKE (6<sup>th</sup> CD)** on the West Branch of the Farmington River in Colebrook was completed in 1969 at a cost of \$14.3 million. At capacity, the 1,300-foot-long, 223-foot-high dam can impound a lake of 1,185 acres containing 16.5 billion gallons of water. To date, the project has prevented damages of \$37 million. Recreational opportunities abound at Colebrook and include boating (with a launching ramp), fishing, ice fishing, and hunting. Nearly 158,000 visitors enjoy the recreational pursuits at Colebrook River Lake each year.

*The Conn. Bicycle Racing Association sponsored the North Atlantic Regional and State Time Trial Bicycle Championships on June 23<sup>rd</sup>.*

**EAST BRANCH DAM (6<sup>th</sup> CD)** is situated on the East Branch of the Naugatuck River in Torrington. The 700-foot-long, 92-foot-high earthfill dam was completed in 1974 at a cost of \$1.9 million. With a storage capacity of 1.4 billion gallons of water, the dam can impound a 158-acre lake. To date, more than \$10.5 million in damages have been prevented by East Branch Dam. The state of Connecticut is responsible for operation and maintenance of the 158-acre facility.

**HALL MEADOW BROOK DAM (6<sup>th</sup> CD)**, located on the brook of the same name in Torrington, was completed in 1962 at a cost of \$2.6 million. The 1,200-foot-long, 73-foot-high earthfill dam can impound a 372-acre lake capable of storing 2.8 billion gallons of water. The facility has prevented damages of \$9.6 million to date. The state of Connecticut is responsible for operation and

maintenance of the 9.4 acre facility.

**HANCOCK BROOK LAKE (6<sup>th</sup> CD)**, on the brook of the same name, was constructed at a cost of \$4.2 million in Plymouth. The 630-foot-long, 57-foot-high earthen dam can create a lake of 266 acres capable of holding 1.3 billion gallons of water. Since it was placed in operation in 1966, it has prevented \$29.8 million in flood damages. More than 6,000 visitors annually enjoy the hiking, fishing and hunting opportunities available at Hancock Brook Lake's 721 acres of land and water.

**HOP BROOK LAKE (5<sup>th</sup> CD)**, situated on the brook of the same name in Waterbury and Naugatuck, was completed in December 1968 at a cost of \$6 million. The 520-foot-long, 97-foot-high embankment can hold back 2.2 billion gallons of water in a 270-acre pool extending 1.5 miles. Hop Brook Lake has prevented damages amounting to \$31 million. The year-round 21-acre conservation pool annually attracts nearly 217,000 visitors who enjoy a variety of recreational pursuits including picnicking, swimming, hiking, fishing, and special permit group events.

The 940-foot-long, 178-foot-high **MAD RIVER DAM (6<sup>th</sup> CD)** is situated on the Mad River in Winchester. Construction for the \$7 million earthen dam was completed in 1963, and since that time the project has prevented an estimated \$2.7 million in damages. When full, the lake behind the dam covers 188 acres and can store more than three billion gallons of water. The state of Connecticut operates and maintains Mad River Dam.

**MANSFIELD HOLLOW LAKE (2<sup>nd</sup> CD)**, on the Natchaug River in Mansfield Hollow, was constructed at a cost of \$6.4 million. The 14,050-foot-long, 68-foot-high dam can impound a 49,200-acre-foot reservoir, which is equivalent to 16 billion gallons of water. Since it was placed in operation in 1952, it has prevented damages of \$43.2 million. The reservoir area offers fine recreational opportunities, including picnicking, fishing, boating, hunting, and nature study and annually attracts more than 463,000 visitors.

*Working cooperatively with a Connecticut*



*Fisheries Biologist, water levels were raised this March to support Northern Pike spawning along Lake Naubesatuck's shore. Supplementing this effort, a small sub-impoundment holds fingerling Pike until they grow too big to be eaten by bass.*

The 810-foot-long, 118-foot-high **NORTHFIELD BROOK DAM (6<sup>th</sup> CD)** was completed in 1965 at a cost of \$2.8 million. Situated on Northfield Brook in Thomaston, the dam, which features an eight-acre recreation pool, can store an estimated 766 million gallons of flood water and has prevented damages to date of \$22.4 million. More than 66,000 visitors annually enjoy fishing, picnicking, swimming, and hiking at Northfield Brook Lake.

**SUCKER BROOK DAM (6<sup>th</sup> CD)**, on a brook of the same name in Winchester, was completed in 1971 at a cost of \$2.4 million. The 1,160-foot-long, 68-foot-high earthen dam can impound a lake covering 53 acres capable of storing 482 million gallons of water. The state of Connecticut is responsible for the operation and maintenance of Sucker Brook Dam.

**THOMASTON DAM (6<sup>th</sup> CD)** is situated on the Naugatuck River in Thomaston. Completed in 1960 at a cost of \$14.3 million, the 2,000-foot-long, 142-foot-high earthen dam can impound a lake covering 960 acres capable of storing 13.7 billion gallons of water. Thomaston has prevented over \$242.3 million in flood damages. An estimated 100,000 visitors annually enjoy picnicking, fishing, hunting and snowmobiling at Thomaston Dam's more than 849 acres of land and water.

*The Corps issued a Special Use Permit to the Pathfinders Motorcycle Club of Bethany, Conn. to conduct its annual regional Junior Enduro/Hare Scrambles Event at the designated trailbike area of the west side of the reservoir on June 16-17<sup>th</sup>.*

*Also, a Military Training Permit was issued to the 2<sup>nd</sup>. Battalion, 417<sup>th</sup> Regiment, USAR to conduct training exercises in the Campville area of Thomaston Dam July 7-8<sup>th</sup>.*

**WEST THOMPSON LAKE (2<sup>nd</sup> CD)** is located on the Quinebaug River in Thompson. Construction for

the \$7 million facility was completed in 1965, and since that time the facility has prevented nearly \$18.4 million in flood damages. The 2,550-foot-long, 70-foot-high dam can impound a 1,250-acre pool capable of storing 8.3 billion gallons of water. Picnicking, hiking, boating, fishing, camping, and hunting are enjoyed by over 90,000 visitors annually to the more than 2,000 acres of land and water at West Thompson Lake stretching six miles from Putnam to the Massachusetts border.

*The 9<sup>th</sup> Annual Earth Day celebration brought out 242 participants young and old. Boy Scouts, Girl Scouts, local residents and frequent user of West Thompson helped to make this year our largest turnout. With a value of service at \$20,363.77, Earth Day helps to jump start our preparations for the recreation season. High water debris and trash filled a 30 yard dumpster, 24 tires were removed from the lake and shoreline, foot bridges were repaired and trails were cut. Two campsites were upgraded with level pads and a fishing platform was built on a popular eroded shoreline spot.*

West Thompson Lake also participated in National River Clean-up Week for the first year with a canoe ride down the Quinebaug River, cleaning-up as we went. Access improvements to the river are being worked on with Connecticut's Thames River Basin Coordinator to develop plans to improve the parking, drainage and cartop boat access.

West Thompson Lake has become a very popular place to hold Field Dog Trial Events. Through June, 45 events have been held bringing over 800 people, 1,000 dogs and \$2,250 to West Thompson Lake. Events are scheduled up to the week before bird hunting season.

*Camping reservations are now accepted via the nationwide National Recreation Reservation Service for the 24-site campground open mid-May through mid-September. Overnight camping fees start at \$10 per site. Senior citizens and people with disabilities utilize the facilities at a 50 percent discount. A campground host site is available to accommodate our volunteer hosts.*

*The lake is billed as one of the best bass fisheries in the state, despite annual alga blooms from phosphorous-laden sediments, which thus far have precluded swimming. A national Corps' initiative to improve aging recreational facilities (RAMP – Recreation Area Maintenance Program) has put West Thompson Lake at the top of a list of Corps projects to receive funds in 2002 to upgrade the boat ramp.*

At **NEW LONDON (2<sup>nd</sup> CD)** facilities to provide hurricane protection to the Shaw Cove area of this northern Long Island Sound community were completed in 1984 at a cost of \$11 million. The project provides protection both from high tides caused by coastal storms and hurricanes, and from interior flooding caused by Truman Brook in the industrial and commercial area in the vicinity of Shaw Cove and New London Harbor. Rock protected earthfill dikes, concrete flood walls, a pumping station and a pressure conduit to evacuate interior drainage are features of the project. In a storm of the magnitude of the 1938 hurricane, New London would afford \$9.6 million in damage prevention.

In Stonington, the **PAWCATUCK-STONINGTON HURRICANE PROTECTION PROJECT (2<sup>nd</sup> CD)** is located on the West Bank of the Pawcatuck River at the Rhode Island-Connecticut state line. The \$920,000 project was completed in 1963. The project consists of 1,915 feet of earth dike, 940 feet of concrete wall, two vehicular structures, and a pumping station. The works afford protection to a 31-acre industrial area and are operated and maintained by the town of Stonington.

Construction of the **STAMFORD HURRICANE PROTECTION BARRIER (4<sup>th</sup> CD)** at Stamford was completed in 1969 at a cost of \$14.5 million. The project consists of three principal features. The West Branch Barrier, which protects the area between the West and East Branches, includes a 1,340-foot concrete wall and a 1,950 foot-long rock-faced earthen dike. The East Branch Barrier, which connects to the West Branch and extends across the mouth of the East Branch, includes 2,840 feet of rock-face earth dike and a 90-foot-wide navigation gate. The Westcott Cove Barrier, which protects the residential area of Rippowam Street and skirts Westcott Cove in Cummings Park, includes 4,200 feet of rock faced earth dike. Damages amounting to \$24.6 million have been prevented to date.

---

## Special Studies

**COASTAL AMERICA** - Coastal America is an interagency partnership aimed at coastal resources restoration. The New England District serves as chair of the Northeast Regional Implementation Team (NERIT) of Coastal America. The NERIT has focused its efforts on habitat restoration and, in particular, restoration of tidally constricted salt marshes. An interagency Memorandum of Understanding has been signed to formally document the Coastal America partners' commitment to salt marsh restoration. The Corps and other agencies are now evaluating restoration projects at over 300 identified sites along the Connecticut coast.

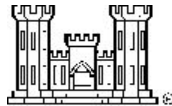
**COASTAL ECOSYSTEM RESTORATION (2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> CDs)** - The Corps conducted an ecosystem reconnaissance for the coastal Connecticut area

where several types of ecosystem restoration projects were identified, including coastal wetland restoration and restoration of riverine migratory corridors for anadromous fish. The Corps worked with the Connecticut Department of Environmental Protection (CT DEP) to prepare a scope of work and cost estimate for the feasibility study of identified sites. The Corps submitted the feasibility project study plan and cost estimate to CT DEP in March 1999. *However, the CT DEP was unwilling to cost-share the study at that time, and negotiations did not result in acceptable changes in scope. We have mutually agreed to terminate study efforts.*

**FAULKNER ISLAND (3<sup>rd</sup> CD)** - Section 527 of the Water Resources Development Act of 1996 authorized the design and construction of shoreline protection measures for the coastline of Faulkner Island adjacent to the lighthouse. The island is

located three miles off the coast of Guilford and is part of the Stewart B. McKinney National Wildlife Refuge. The Corps of Engineers worked closely with the U.S. Fish and Wildlife Service and the state of Connecticut to insure that the rock revetment protection measures would be compatible with the endangered Roseate Terns that occupy the island from May through August. The project was broken into two construction phases to allow for an interim assessment of impacts on the nesting Roseate Terns. A \$2.1 million contract for the Phase 1 work was awarded to Zenone, Inc., of Franklin, Massachusetts, in July 2000. Construction activities began in September, at the beginning of the environmental window. *Stone revetment has been placed. A geocell to protect the slope below the Faulkner Island Lighthouse has been installed and stone bird houses to provide additional tern habitat have been constructed. The project has been physically completed and the contractor demobilized from the site on April 24, 2001.*

**LONG ISLAND SOUND DREDGED MATERIAL DISPOSAL SITE DESIGNATION EIS (2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> CDs)** – The New England District, in cooperation with the New York District and EPA Regions I and II, is conducting an Environmental Impact Study (EIS) of dredged material management practices in Long Island Sound, with a view towards designating one or more open water dredged material disposal sites in the Sound in accordance with the Marine Protection Research and Sanctuaries Act. The states of Connecticut, New York and Rhode Island are participating in the study. Field investigations for the EIS began in January 2000 and will continue through the spring of 2004. Public involvement efforts began in July 1999 and will continue throughout the study. A draft EIS is scheduled for public review in June 2004, with a final EIS and site management plans to follow in December 2004. Final site designation by EPA would occur in April 2005, if any open water sites are identified by the EIS.



Public Affairs Office  
New England District  
U.S. Army Corps of Engineers  
696 Virginia Road  
Concord, MA 01742-2751

Presorted Standard  
U.S. Postage  
Paid  
Concord, MA  
Permit No. 494

Meter Code 40

## ***Update Report***